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United States Department of Agriculture
Bureau of Entomology and Plant Quarantine

LABELS FOR MARKING EXPERIMENTAL TREES

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In laying out plots of orange trees for spraying experiments, small groups of trees were used for each treatment, and these groups were replicated a number of times instead of following a row-plot system. Since the replications of each spray treatment were well separated and were placed irregularly through the blocks, it was necessary to have labels on several sides of each tree so that the small groups of trees could be located easily when approached for spraying from any direction. Labels were desired that were light enough to do no damage to the trees, durable enough to stand up under insecticides and the subtropical weather, clear and large enough to be seen at a distance, and inexpensive.

After some thought it was decided to make use of manila paper tags and to dip these in weather-proof paint, after which they could be stenciled on both sides with plot numbers or letters. Two thousand manila tags of the no. 8 size ($3\frac{1}{8}$ by $6\frac{1}{4}$ inches) were ample for five experimental plots, including more than 600 trees. These tags were dipped one by one in white, quick-drying lacquer, similar to that extensively used on automobile bodies, and then were placed in an improvised drying rack until dry. A stencil set was obtained which made letters 2 inches high, and black lacquer was used for the lettering. The tags were stenciled on both sides so that turning of tags on the trees would not make reading more difficult. Heavy cord was used for tying the labels to the outside branches of the trees.

The drying racks were made in the laboratory, of 28-gauge galvanized sheet metal, $\frac{1}{2}$ by $\frac{3}{4}$ inch wooden molding, and strips of 16-mesh galvanized screening. The two end pieces of the rack were cut from the sheet metal in triangular shape, as illustrated in figure 1. The molding was sawed into three 36-inch lengths, and to each length, on the $\frac{3}{4}$ -inch surface, was tacked a 1-inch strip of the screening so that half of the strip extended outward from the edge of the molding. Two or three horizontal wires were stripped from the screening, leaving toothlike projections. These molding strips were nailed to the end pieces so that the freshly painted tags would be held in three-point suspension between the sets of wire teeth, for draining and drying. A trough of the sheet metal underneath the lower corners of the freshly dipped tags collected excess paint, which was used again after being thinned. A rack in use is shown in figure 2.

It was found convenient to have three of these drying racks. The total cost for the materials for each rack was less than 20 cents. Materials for 2,000 labels cost \$14.30, as itemized below:

2,000 tags.....	\$2.64
White lacquer (7 qts.).....	10.40
Black lacquer ($\frac{1}{2}$ pt.).....	.50
Turpentine.....	.76

The tags have been satisfactory in every respect, and the idea is submitted in the hope that it will be found useful at other laboratories.

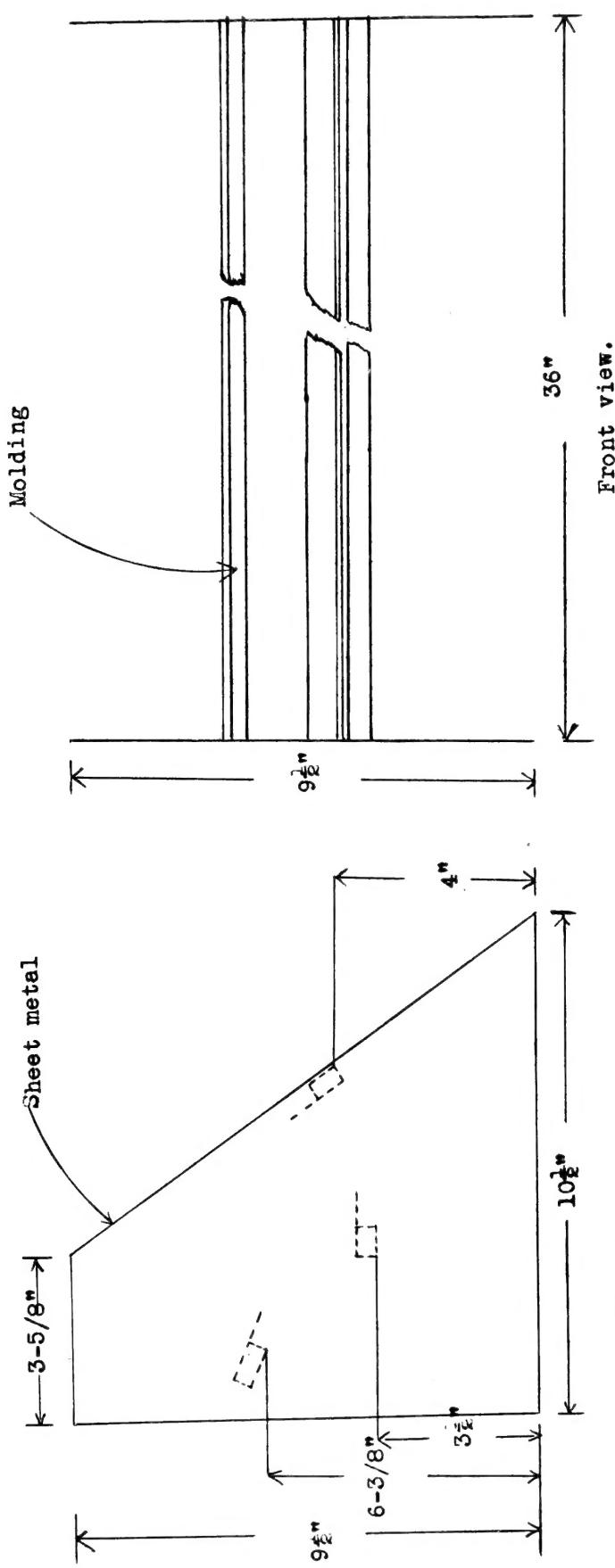


Figure 1.— Drying Rack for Labels.



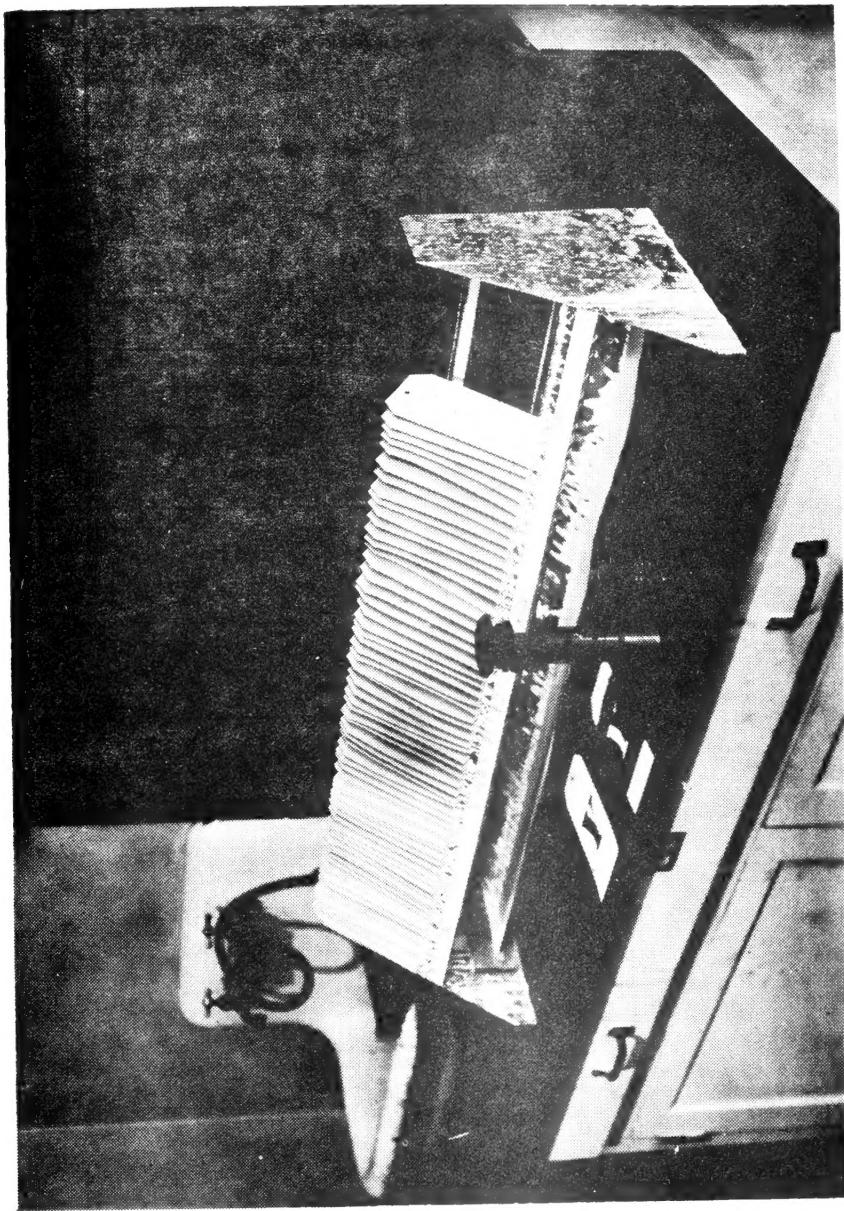


Figure 2.—Labels drying in rack.

